

FIG. 1A

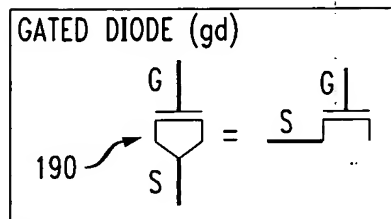


FIG. 1B

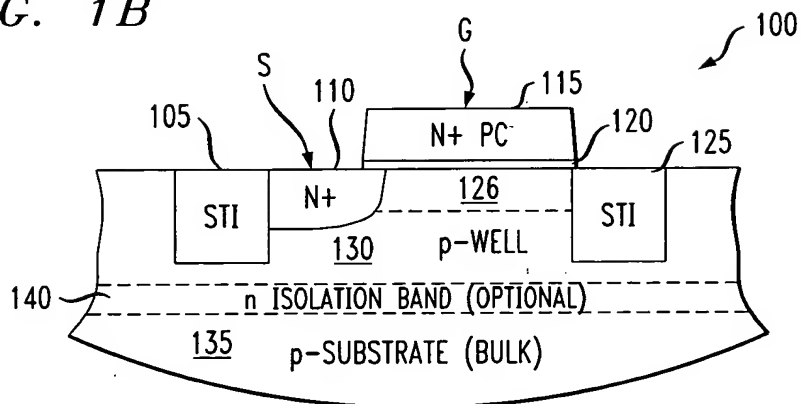


FIG. 1C

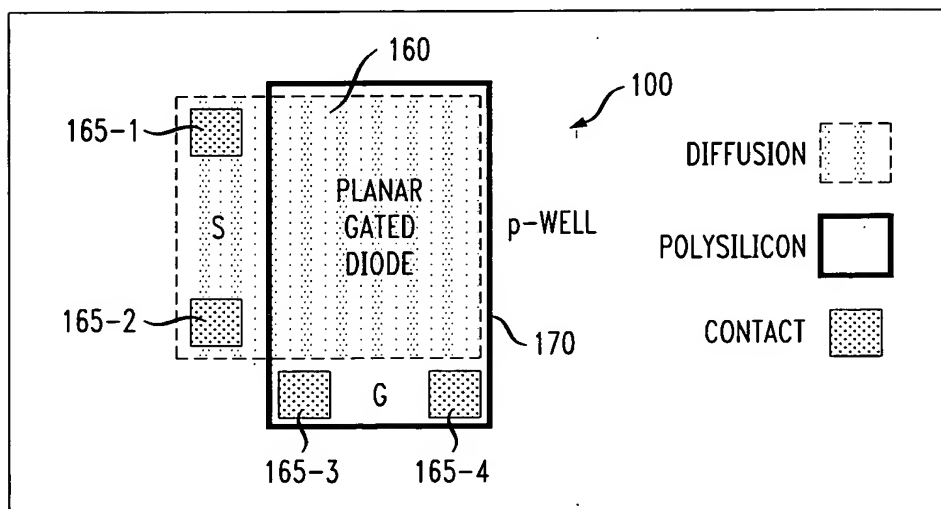


FIG. 2A

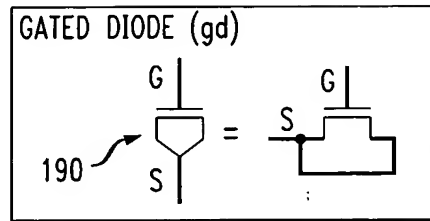


FIG. 2B
PRIOR ART

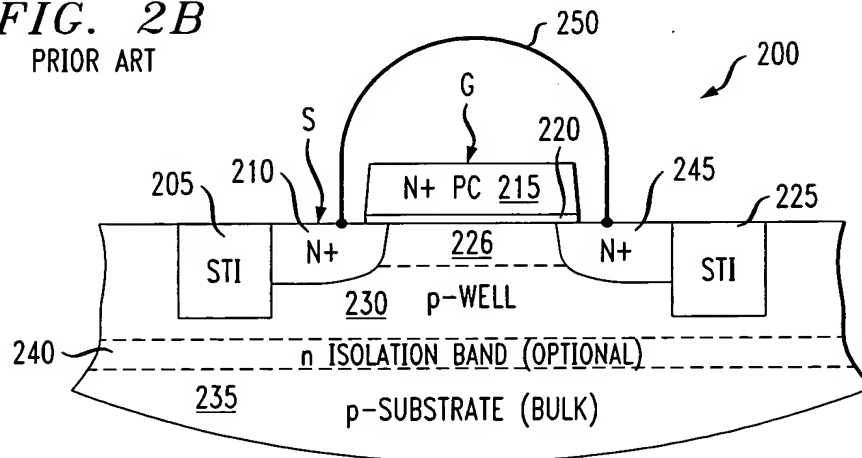


FIG. 2C

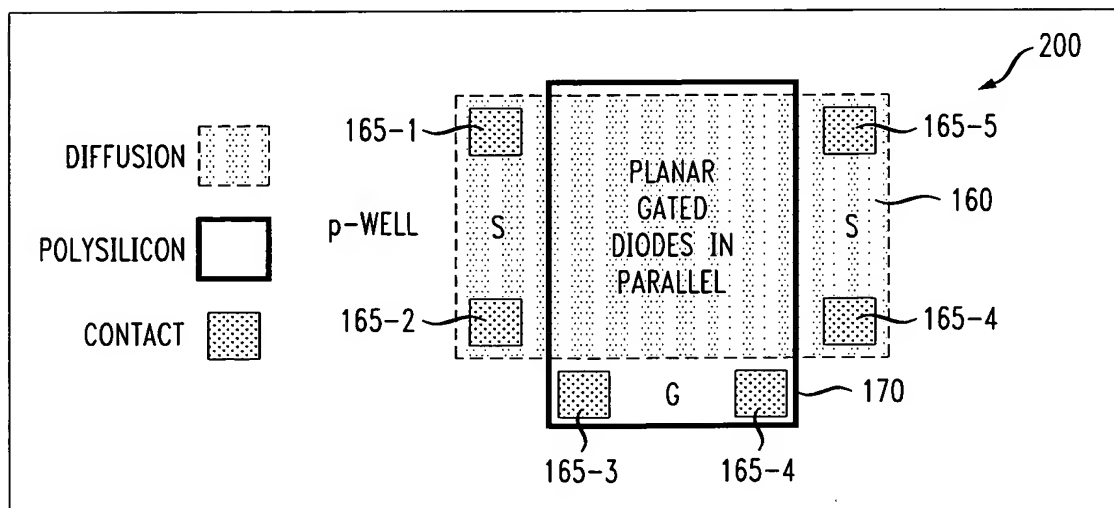


FIG. 3A

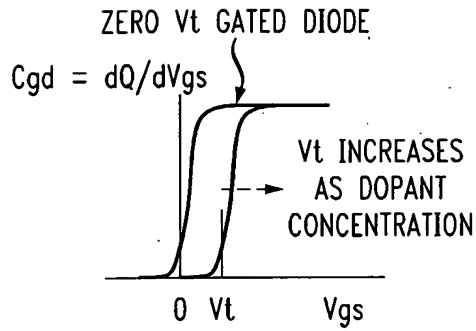


FIG. 3B

GATED DIODE CAPACITANCE vs GATE-TO-SOURCE VOLTAGE (V_{gs})
EACH CURVE REPRESENTS A DIFFERENT GATED DIODE GATE SIZE.
THRESHOLD VOLTAGE = 0.2 V

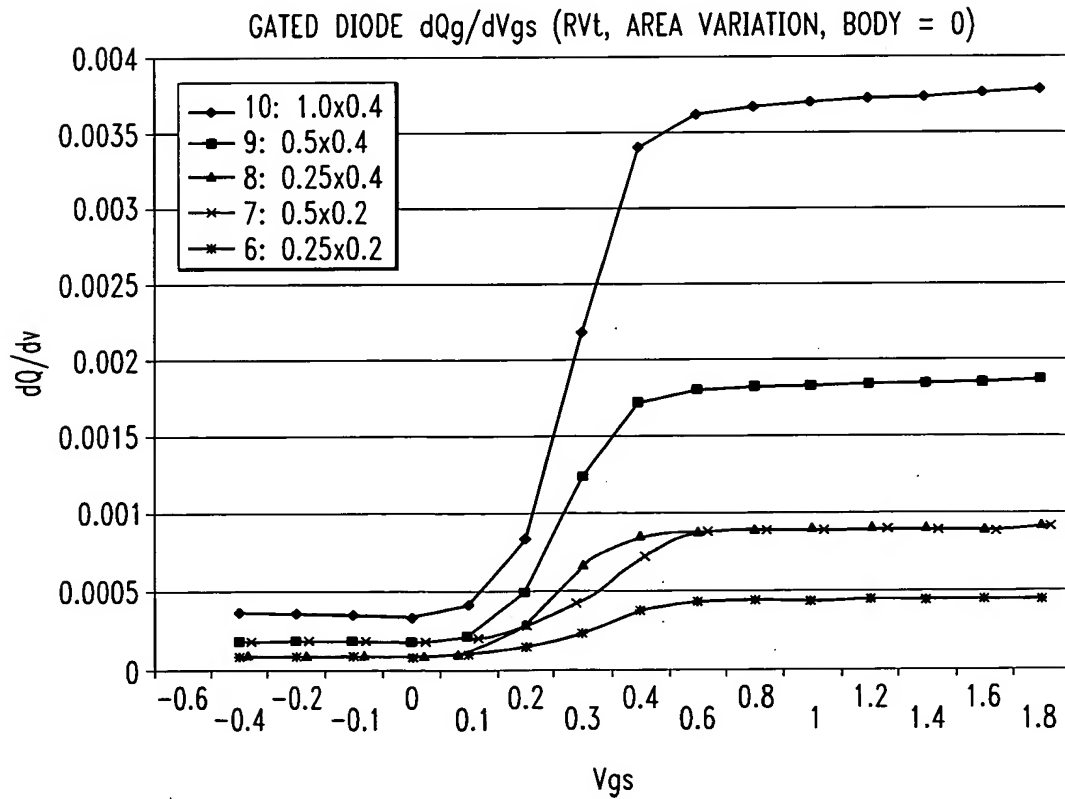


FIG. 4A

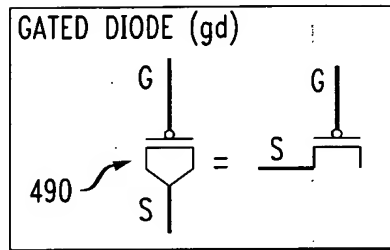


FIG. 4B

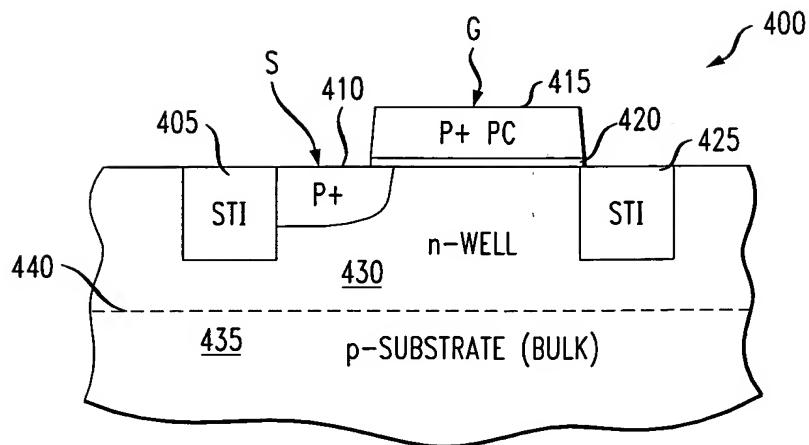


FIG. 5A

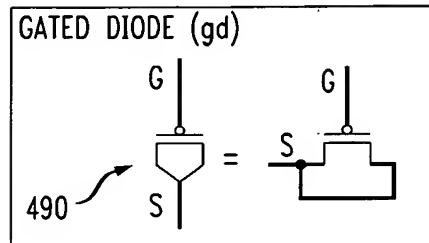


FIG. 5B

PRIOR ART :

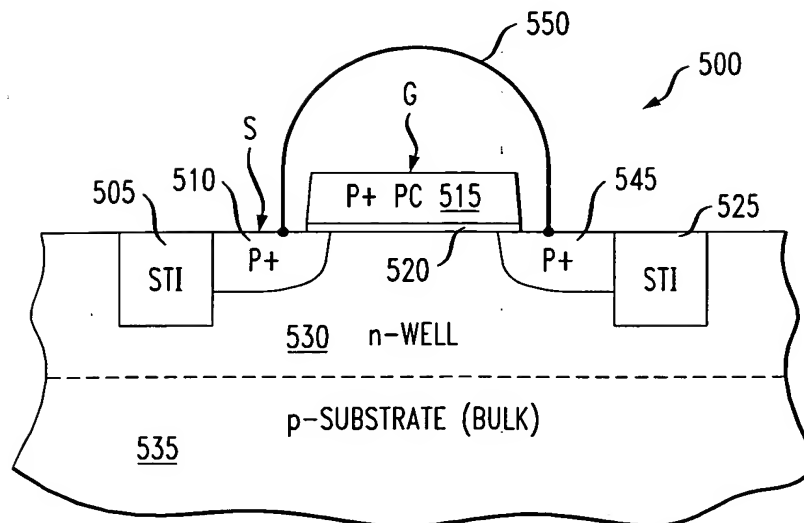


FIG. 6

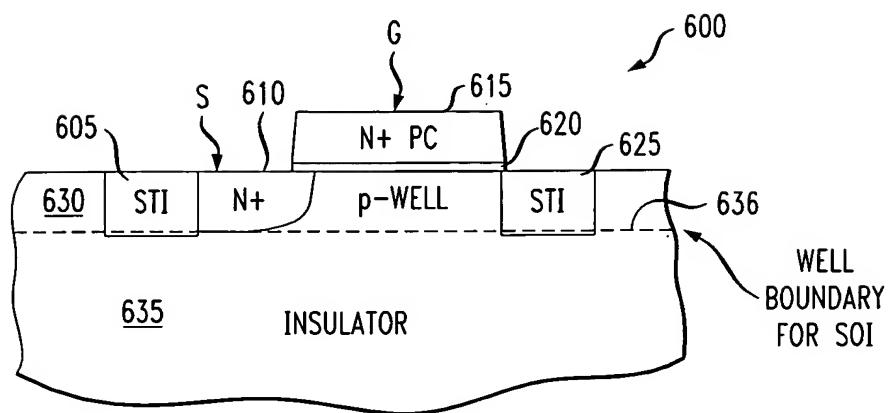


FIG. 7
PRIOR ART

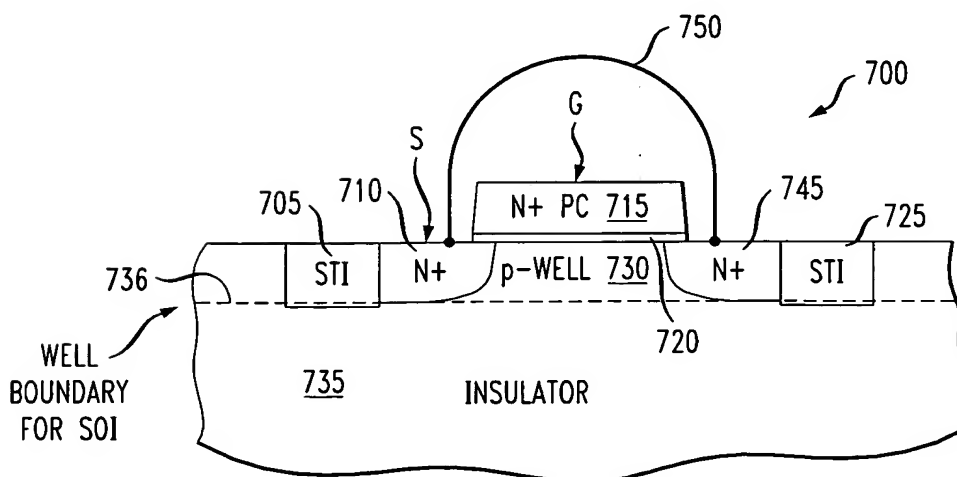


FIG. 8

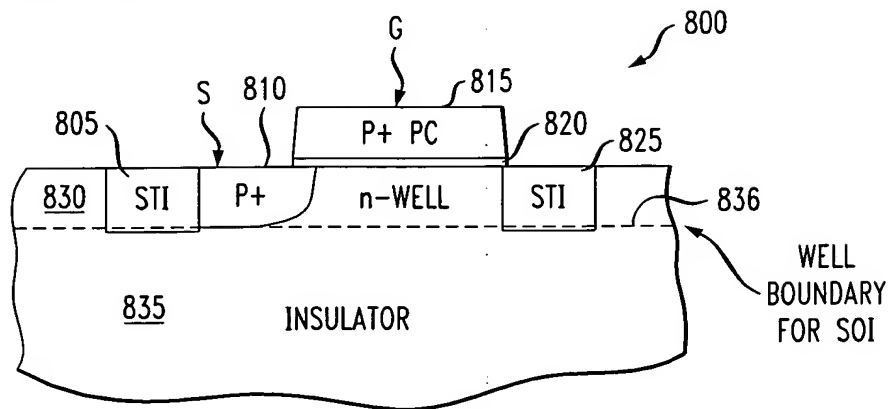


FIG. 9
PRIOR ART

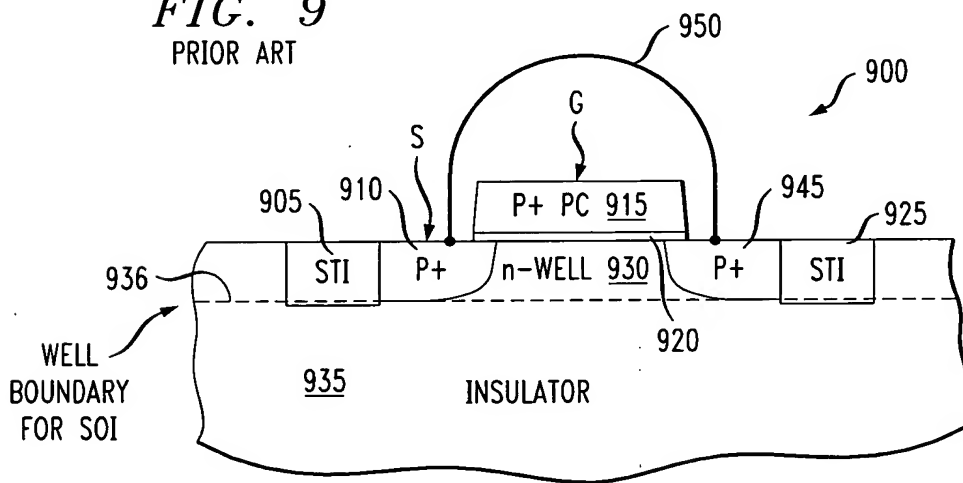


FIG. 10

LINEAR CAPACITOR

$$\text{GAIN} = dV_{\text{out}}/dV_{\text{in}} = 1$$

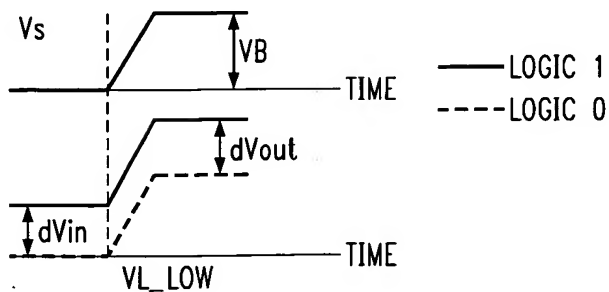


FIG. 11A

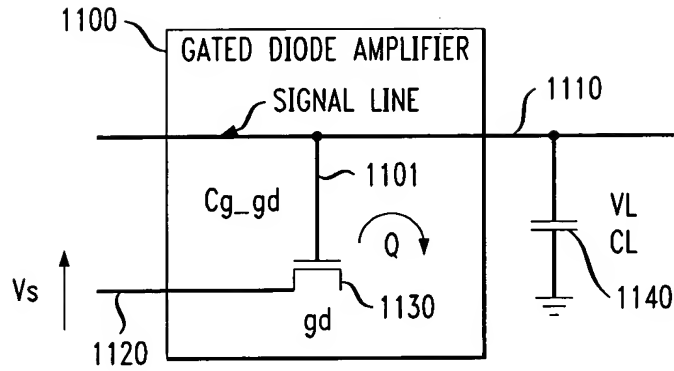


FIG. 11B

GATED DIODE AMPLIFIER REPRESENTATIVE CIRCUIT

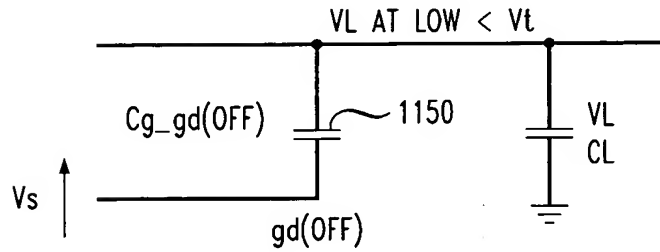


FIG. 11C

GATED DIODE AMPLIFIER REPRESENTATIVE CIRCUIT

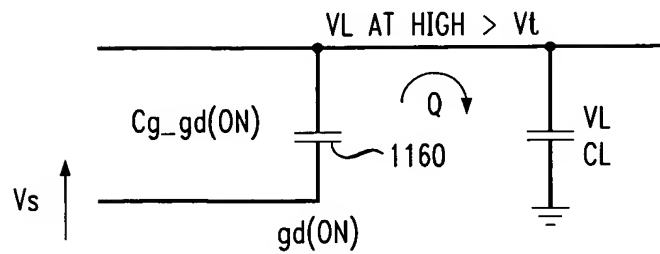


FIG. 12A

GATED DIODE

$$\text{GAIN} = dV_{\text{out}}/dV_{\text{in}} > 1$$

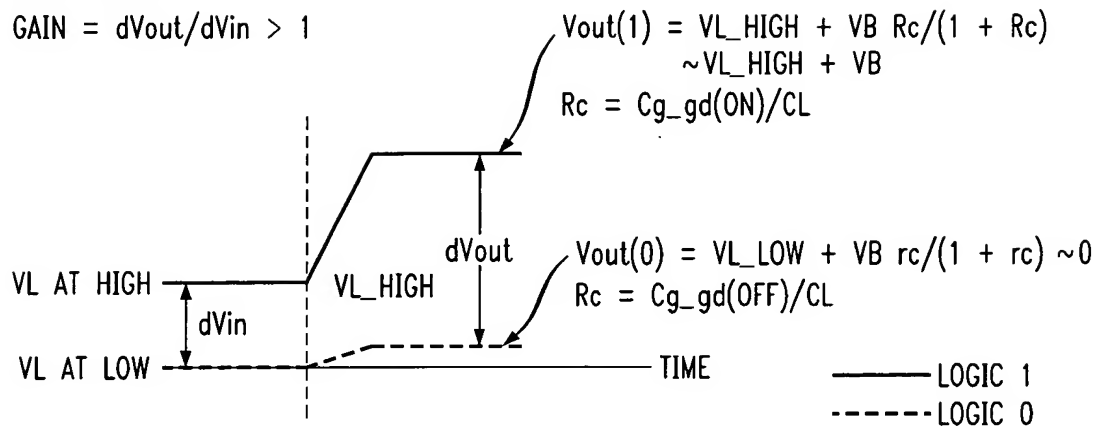


FIG. 12B

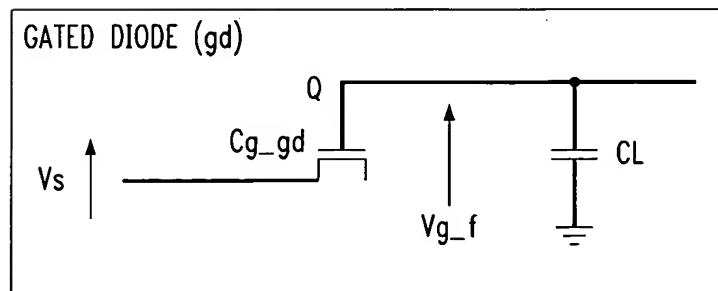


FIG. 12C

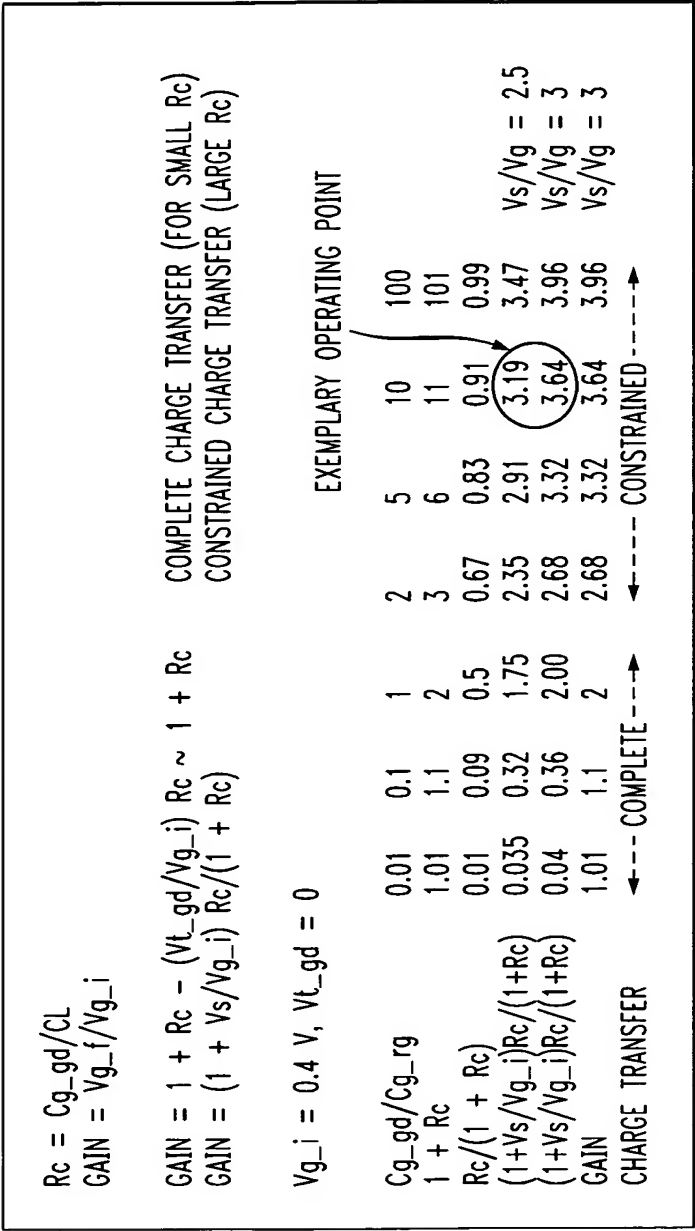


FIG. 12D

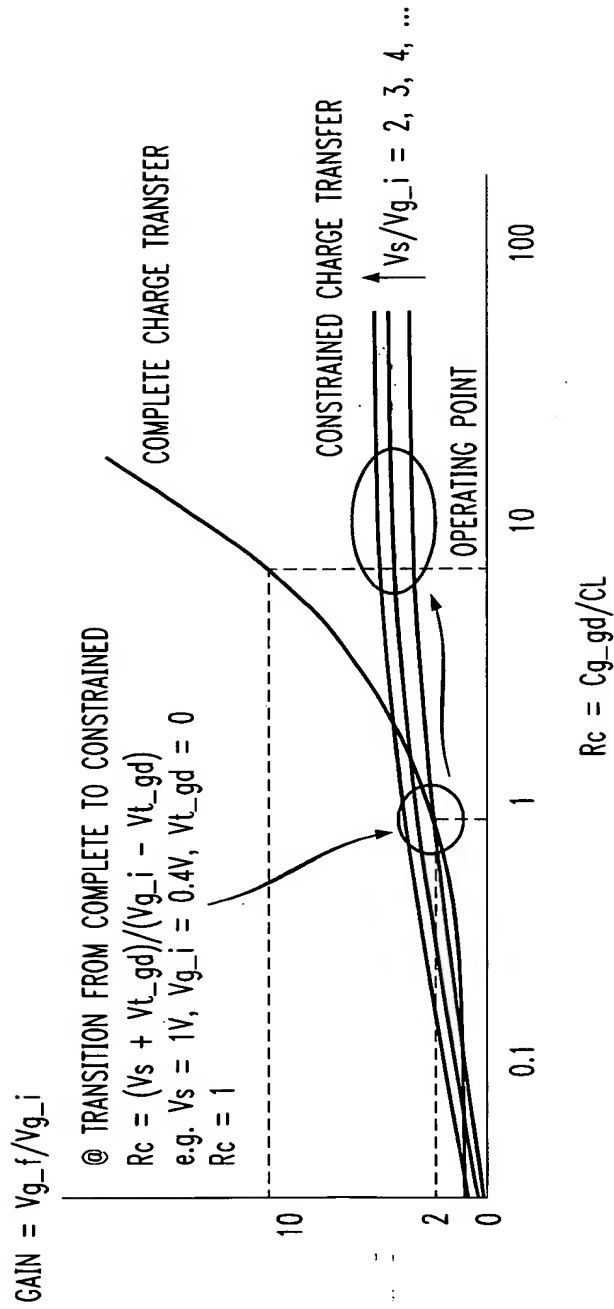


FIG. 13

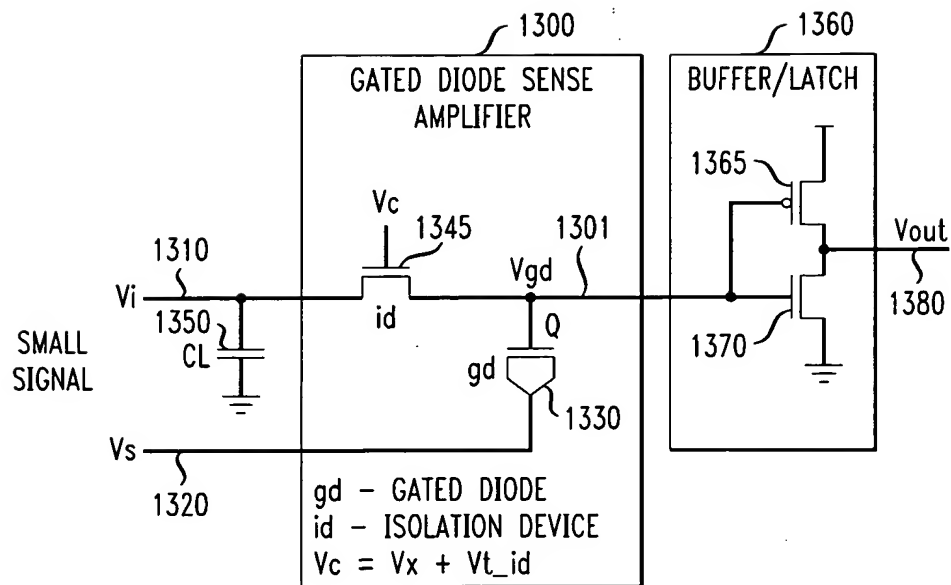


FIG. 14

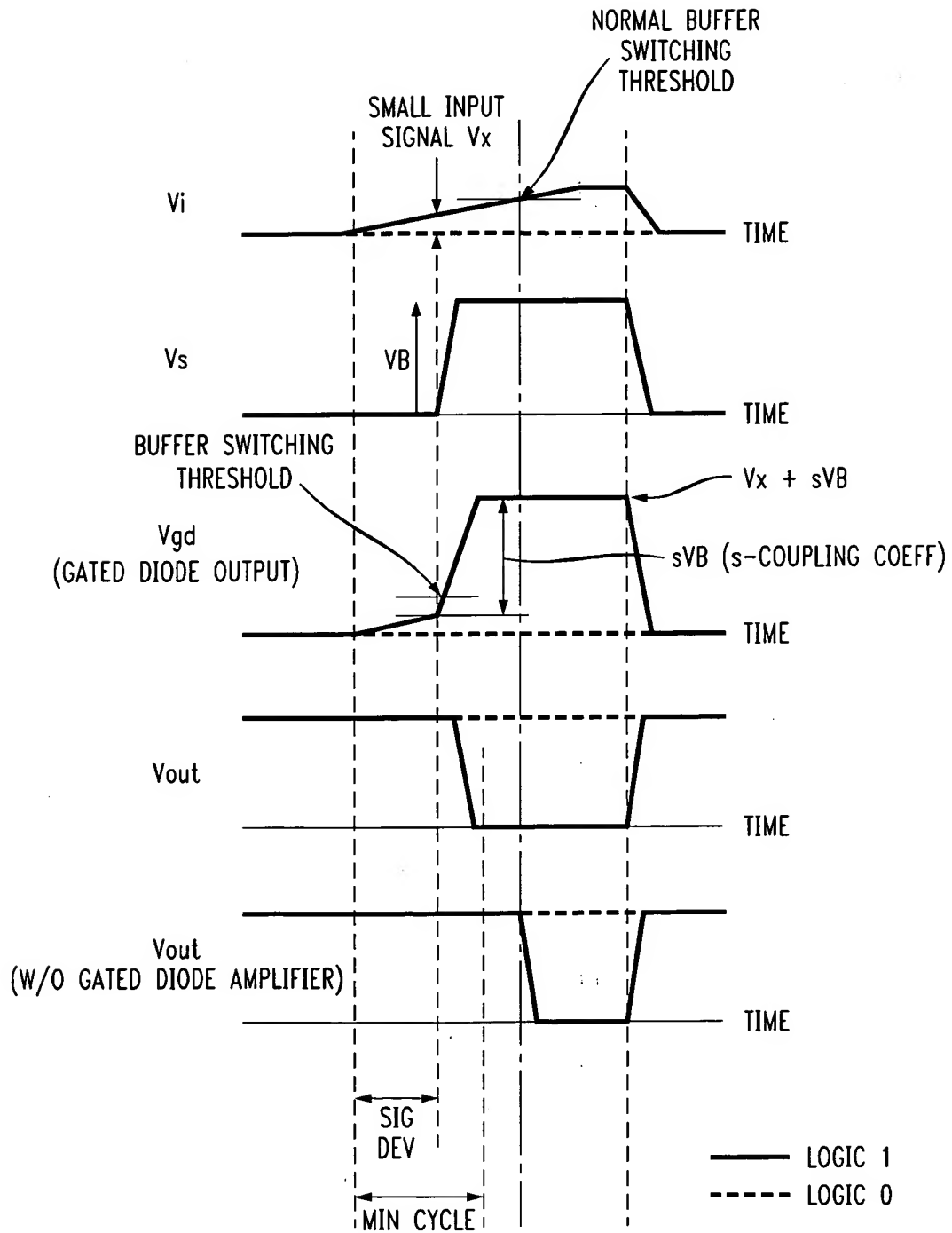


FIG. 15

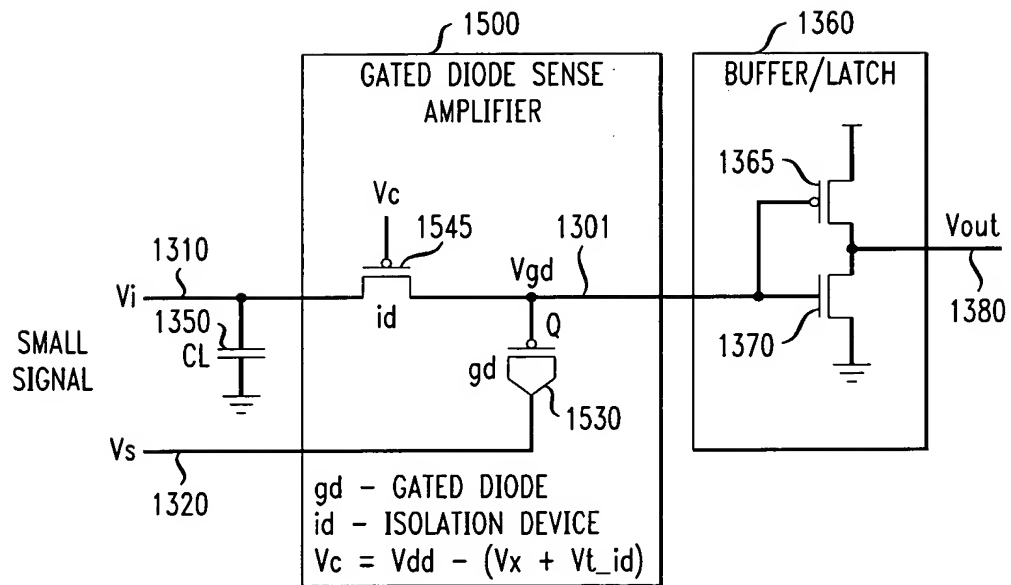


FIG. 16

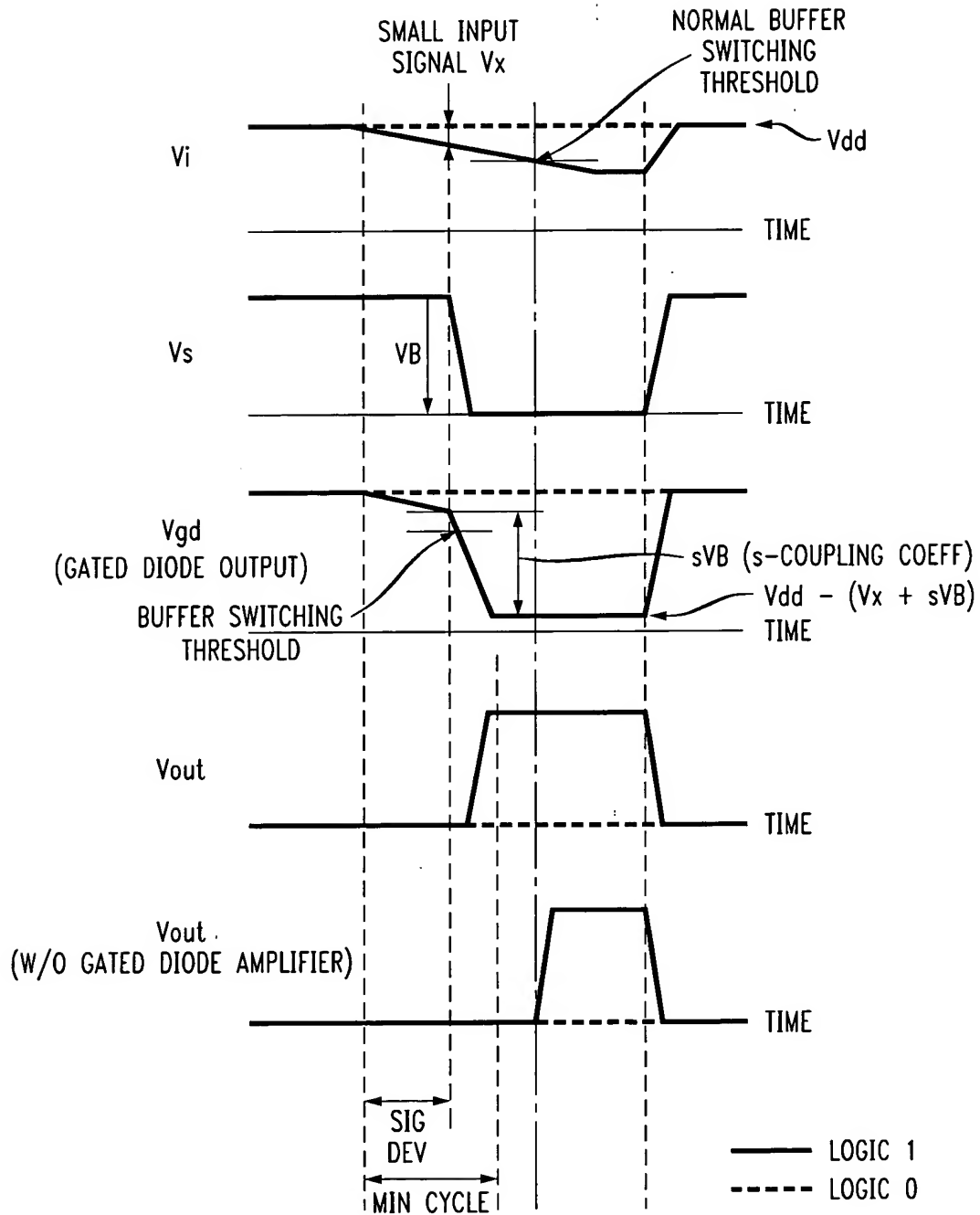


FIG. 17

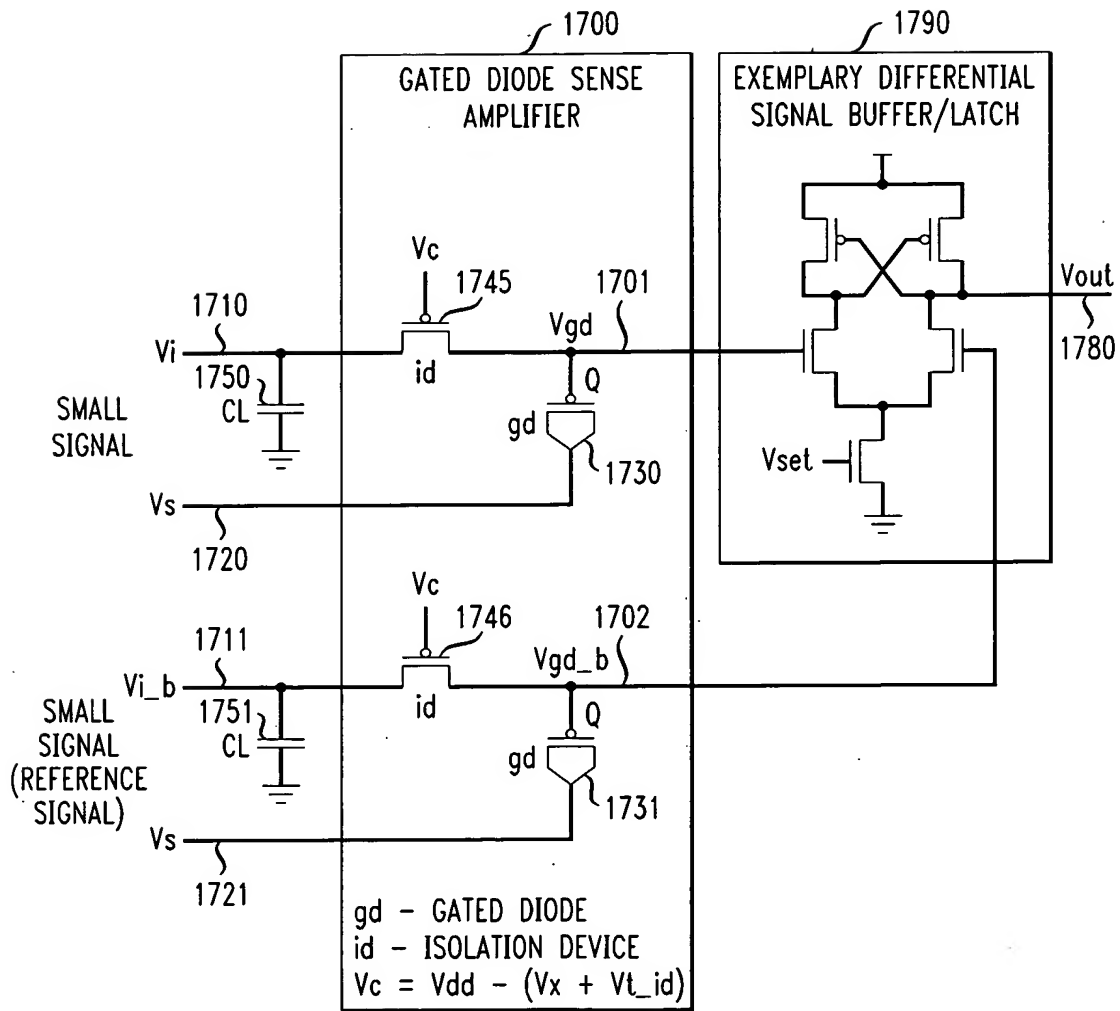


FIG. 18

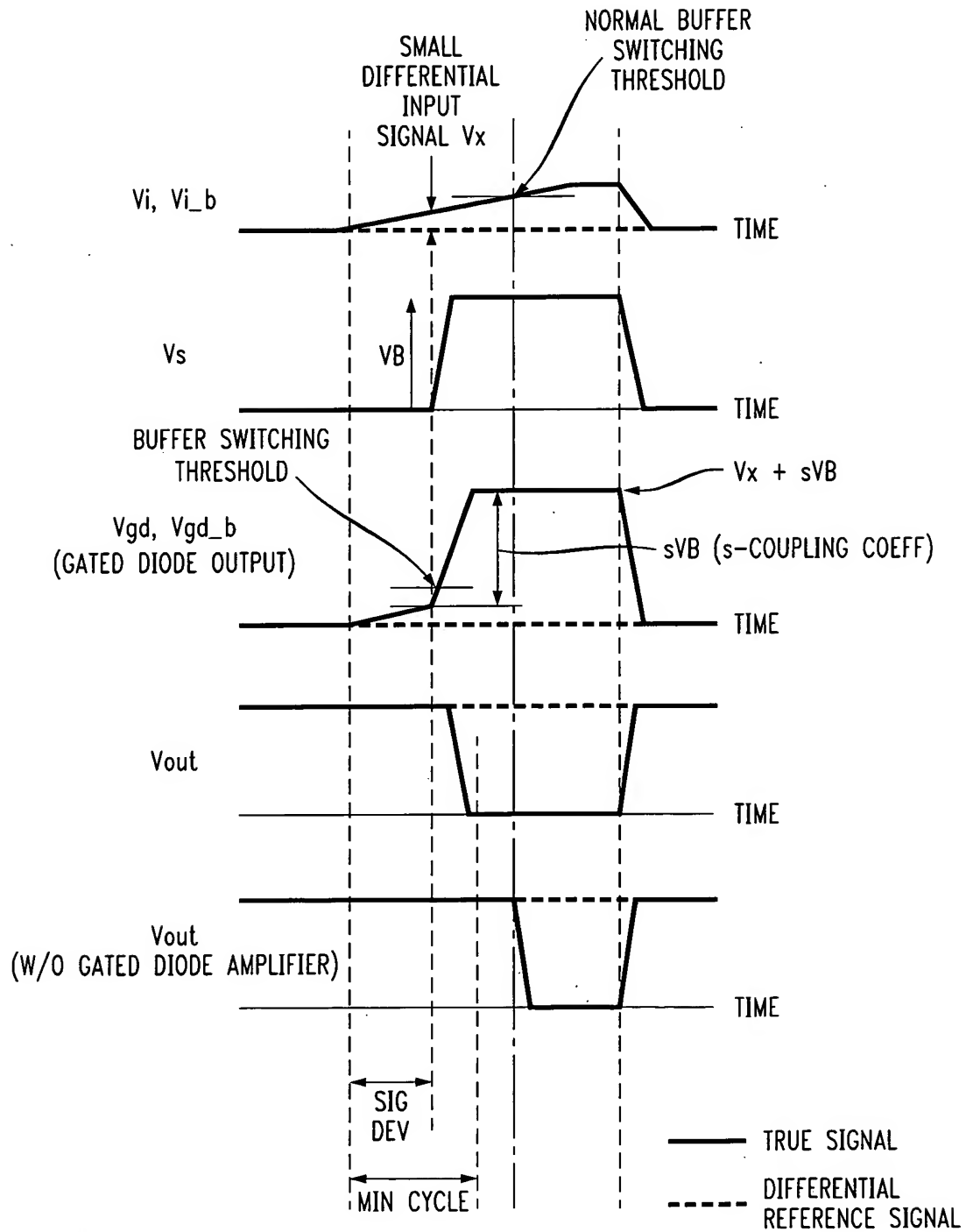


FIG. 19A

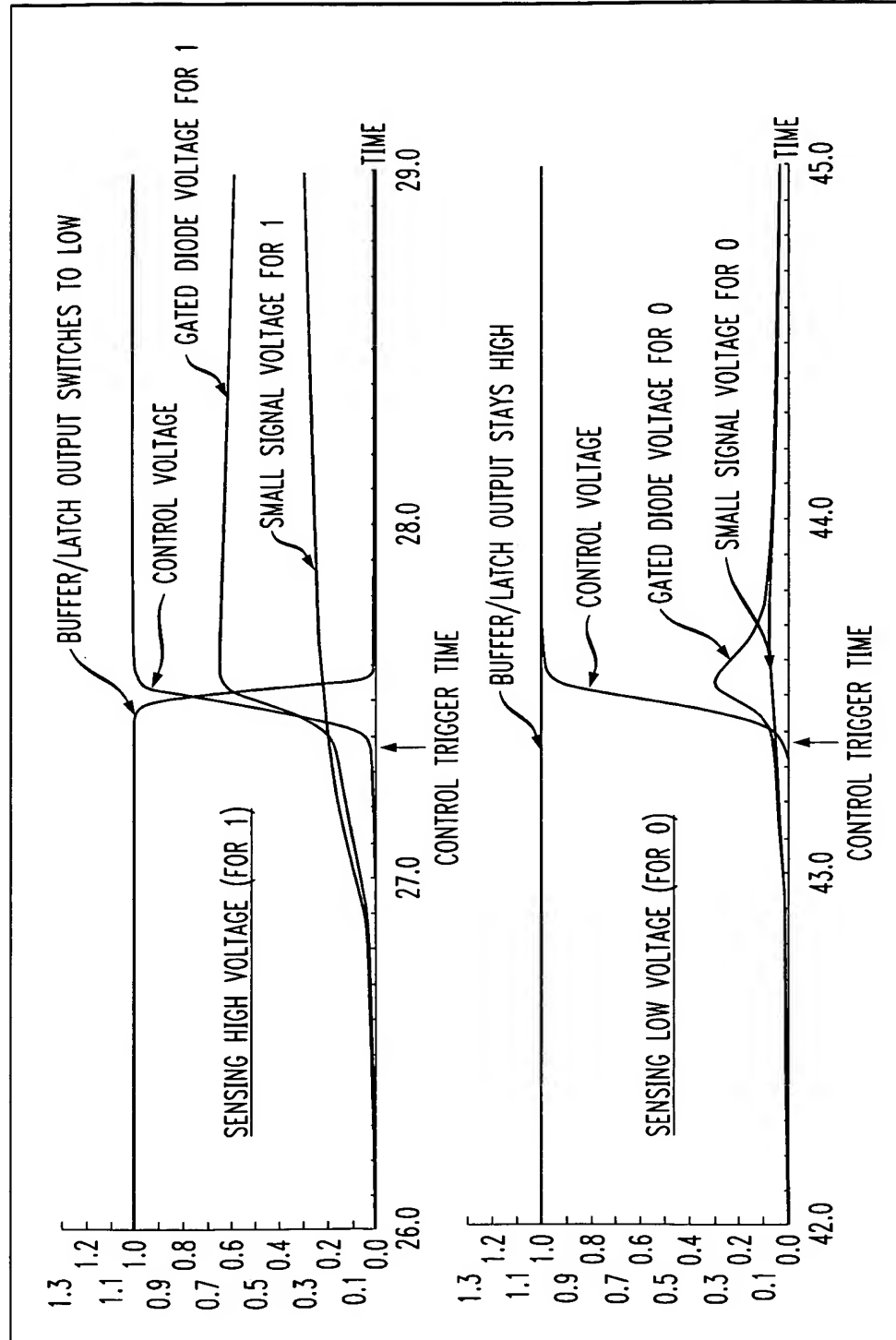


FIG. 19B

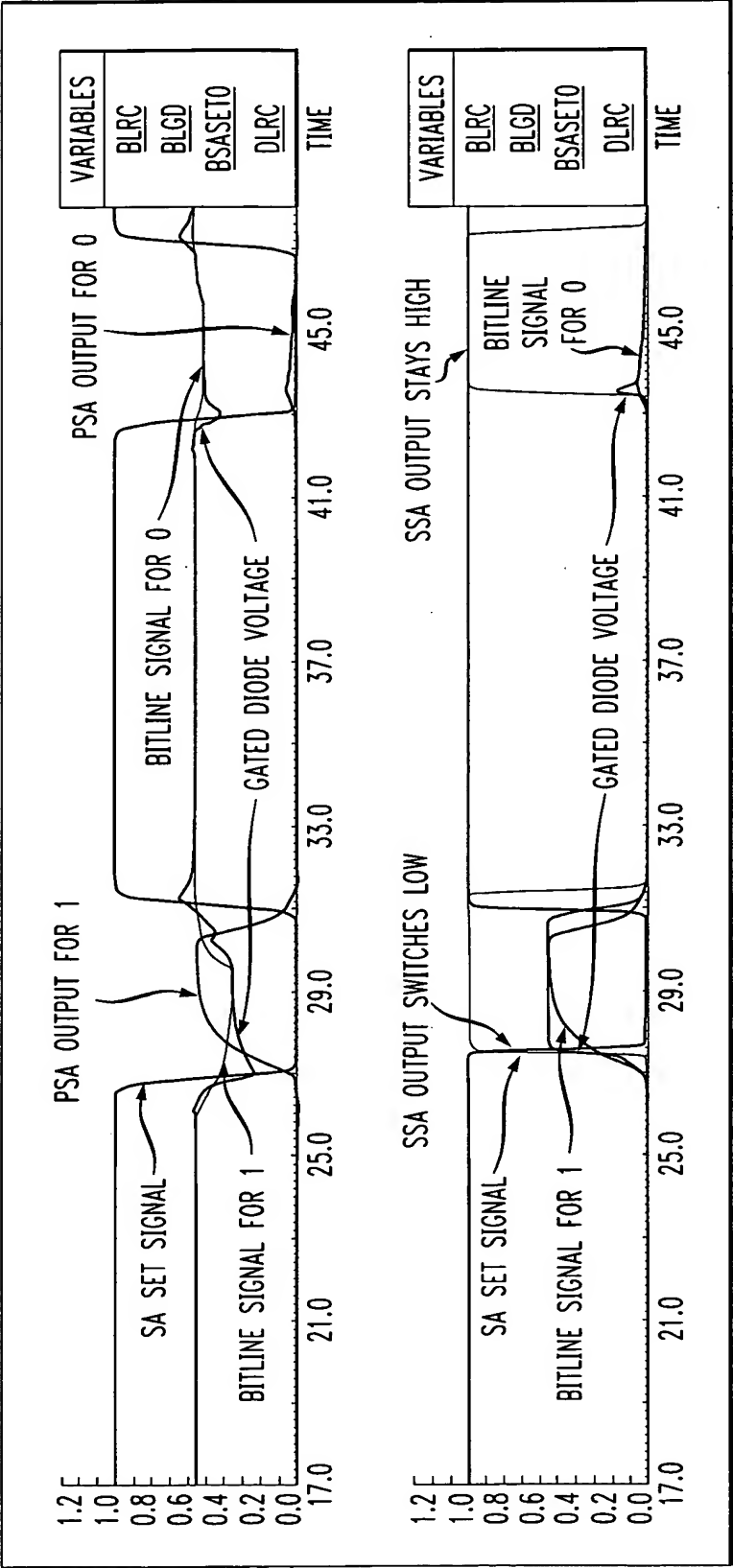


FIG. 20A

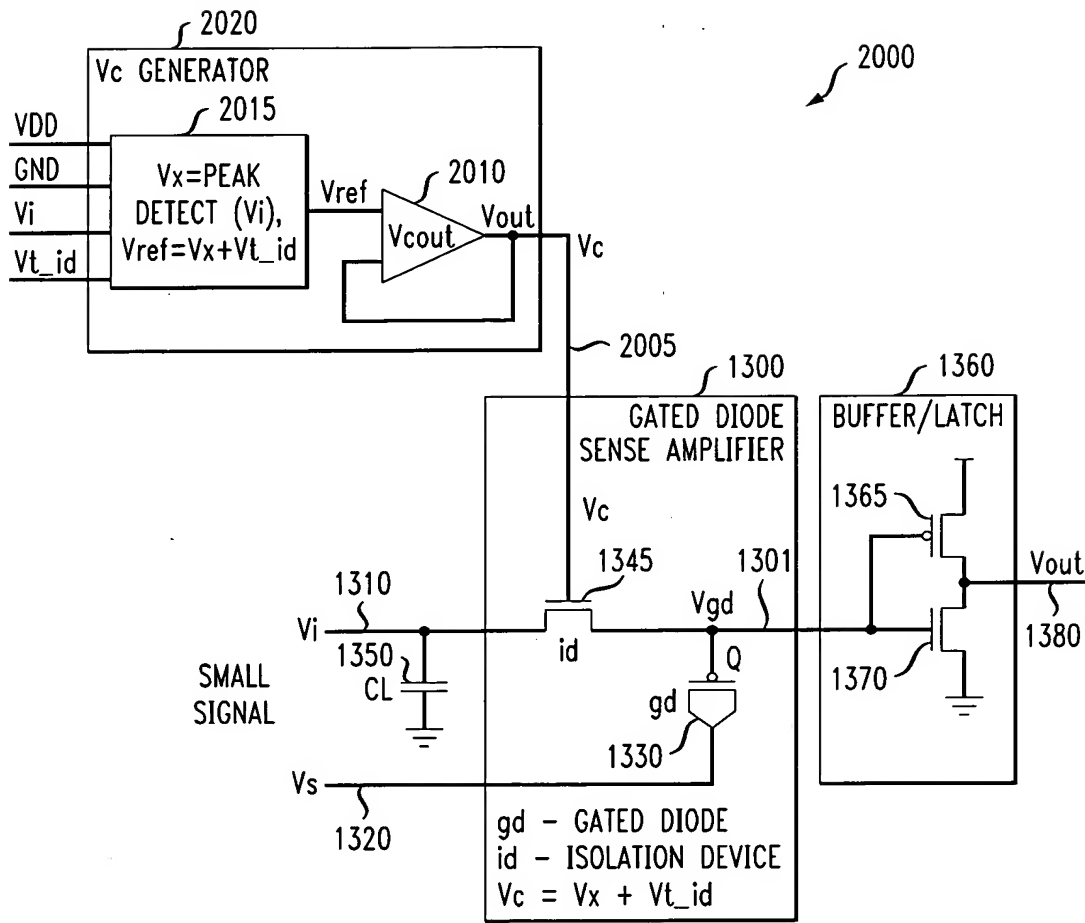


FIG. 20B

